Catalogue of American Amphibians and Reptiles.

Smith, H.M., E.A. Liner, D. Chiszar, G. Pérez-Higareda, and F. Mendoza-Quijano. 2006. *Sceloporus megalepidurus*.

Sceloporus megalepidurus Smith
White-bellied Cursorial Spiny Lizard

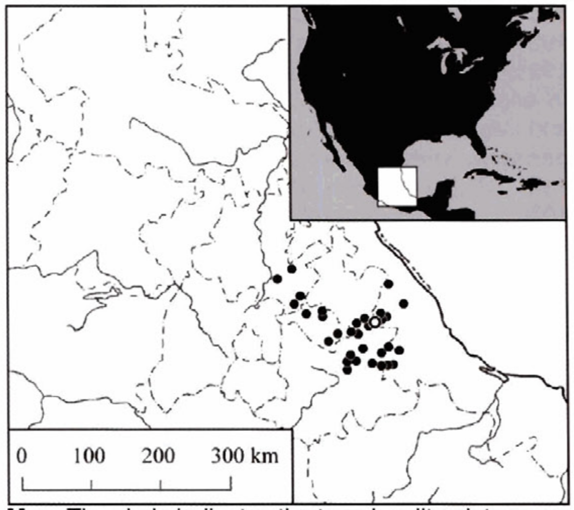
Sceloporus gratiosus: Günther 1890:71 (part).
Sceloporus microlepidotus: Blatchley 1893:41 (part).
Sceloporus megalepidurus Smith 1934:272. Type-locality, "near Totalco, Vera Cruz, Mexico". Holotype, EHT/HMS 2908, Field Museum of Natural History (FMNH) 100107, female, collected by E.H. Taylor and H.M. Smith, 19 July 1932.
Sceloporus megalepidurus megalepidurus: Dasmann and Smith 1974:235.

• **CONTENT**. No subspecies are recognized.

• **DEFINITION and DIAGNOSIS**. A small, terrestrial, viviparous species, maximum SVL ca. 55 mm; a dorsolateral light line, bordered laterally by a broad dark band in turn bordered by a lateral light line followed by a broad dark area extending to sides of abdomen; sides of body speckled in males, interrupting lines and bands; a series of 12–13 small, irregular dark spots on either side of midline, with some light flecking between; venter of both males and females immaculate. Dorsal scales 54–62 (mean = 57.5, n = 50); lateral scales in oblique rows; femoral pores unilaterally 13–18 (mean = 15.6, n = 100), minimum scales between femoral pore series 4–8 (mean = 6.2, n = 50); a pair of enlarged postanals in males. A series of post-rostrals, usually 4; one canthal; supraoculars in 2 rows, rather irregular, inner row larger. The species most similar is *S. pictus*, in which well-developed abdominal semeions are regularly present in males.



Figure 1. Dorsal and verntral views of a male *Sceloporus megalepidurus* from Ciudad Serdán, Puebla, Mexico. Photographs courtesy of Peter Heimes.



Map. The circle indicates the type-locality; dots represent localities where *Sceloporus megalepidurus* has been collected. Courtesy of Whitney C. Johnson and Dr. Sharon K. Collinge, EE Biology, University of Colorado.

• **DESCRIPTIONS**. Other descriptions are in Smith (1934, 1939), and Köhler and Heimes (2002).

• **ILLUSTRATIONS**. Dasmann and Smith (1974) provided black-and-white and Köhler and Heimes (2002) color photographs. Line drawings of scalation were provided by Smith (1934, head scales and dorsal view) and Smith (1939, head scales). Etheridge (1964) illustrated skeletal elements. Hall (1973) provided a black-and-white photograph of the karyotype.

• **DISTRIBUTION**. This species is found in high altitude (2100–2600 m) oak-evergreen forest grassland along the Sierra Madre Oriental from southeastern Hidalgo, northern and eastern Puebla, eastern Tlaxcala and extreme central western Veracruz as far south as the vicinity of Esperanza, Puebla, and adjacent Veracruz. Smith (2001) provided a range map.

• **FOSSIL RECORD**. None.

• **PERTINENT LITERATURE**. Pertinent literature other than that cited elsewhere in this review deals with the following subjects: **anatomy and morphology**: Burstein et al. 1974, Etheridge 1964, Fitch 1978, 1981, Larsen and Tanner 1974, and Olson et al. 1986, 1987; **conservation**: CCNNPA 2000, SEDESOL 1994; **ecology and zoogeography**: Blatchley 1893, Camarillo-Rangel 1993, 1998, Camarillo-Rangel and Aguilar-Coetés 1992, Casas-Andreu et al.

1997, Flores-Villela 1993, Flores-Villela and Gérez 1988, 1994, Flores-Villela et al. 1991, González-Ruiz 1991, Pelcastre-Villafuerte 1991, Pelcastre-Villafuerte and Flores-Villela 1992, Sánchez-Herrera 1980, and Vega-López and Álvarez-Solórzano 1992; **comparisons with congeners**: Dasmann and Smith 1974 (*S. halli),* Lynch and Smith 1965 and Smith 1936 (*S. pictus)*; **general works**: Köhler and Heimes 2002; **karyology**: Gilboa 1974, Hall 1971, 1973, 1980, Hall and Selander 1973, and Sites et al. 1992; **parasites**: Goldberg et al. 2003; **phylogeny and systematics**: Cox et al. 2003, Flores-Villela et al. 2000, Harmon et al. 2003, Larsen and Tanner 1974, 1975, Martins 1993, Schulte et al. 2003, Sites et al. 1992, Smith 2001, Warheit et al. 1999, Wiens 1993, 1999, 2000, Wiens and Penkrot 2002, Wiens and Reeder 1997, Wiens et al. 1999, and Wyles and Gorman 1978; **reproduction**: Blackburn 1985, Godínez-Cano 1985, González-Ruiz and Godínez-Cano 1987, Guillette et al. 1980, Guillette and Méndez-de la Cruz 1993, Méndez-de La Cruz and Villagrán-Santa Cruz 1995, Méndez-de La Cruz et al. 1998, Shine 1985, and Villagrán-Santa Cruz et al. 1994. The species is mentioned in the following **checklists, keys, and similar venues**: Bell et al. 2003, Camarillo-Rangel et al. 1987, Casas-Andreu 1979, Casas-Andreu and Sánchez-Herrera 1978, Cochran 1961, Dasmann and Smith 1973, Etheridge 1960, Ferrari-Perez 1886, Flores-Villela et al. 1995, Godínez-Cano and González-Ruiz 1987, Frank and Ramus 1995, Leache and Reeder 2002, Liner 1994, Martínez-Isaac 1985, Marx 1976, Rizo-Aguilar and González-Romero 1998, Savitzky and Smith 1977, Slavens 1989, Smith 1987, 1992, Smith and Lynch 1967, Smith and Smith 1976, 1993, Smith and Taylor 1950a,b, Smith et al. 1964, Sokolov 1988, Taylor 1944, and Wills 1977.

• **ETYMOLOGY**. The specific name was derived from the Greek "MEGA" (large), "LEPIS" (scale) and "OURUS" (tail), applied in reference to the relatively large caudal scales, compared with the dorsals on body.

• **REMARKS**. Since 1974 (Dasmann and Smith) this taxon has usually been recognized at the subspecific level, until 1997 (Wiens and Reeder), when it was re-elevated to species rank. That conclusion is supported by the absence of male semeions - the chief character separating *S. megalepidurus* from *S. pictus*. There is no evidence of intermediacy among the specimens reported by Dasmann and Smith (1974), as stated in Smith et al. (2000); they were interpreted as intergrades merely because of sympatry.

In some parts of its range (e.g. southeastern Hidalgo, northern Puebla) *S. megalepidurus* appears to be quite rare and locally extirpated (FMQ, field observations), perhaps because of habitat loss.

The standard English name here adopted for this species reflects its extensive similarity to *S. pictus*, the Painted Spiny Lizard. The chief difference from the latter is the absence of abdominal semeions in males.

The citation of *S. megalepidurus* for Oaxaca in Casas-Andreu et al. (1995) actually is based on *S. halli.*

The display-action patterns referred to this species by Carpenter (1978, 1986) actually pertain to *S. pictus,* as do Camarillo and Coetés (1992), González-Alonso et al. (1985), González-Pérez (1986) and Casas-Andreu et al. (1997).

• **ACKNOWLEDGMENTS**. We are grateful to the curators of the collections at AMNH, CM, ENCB, IPN, FMNH, KU, LACM, LSUMZ, MCZ, TCWC, TNHC, UCM, UIMNH, UMMZ, USNM, and UTA for information on their holdings of this species (acronyms follow Leviton et al. 1985).

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